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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,465	10/20/2003	Reuben Clark	033680-001	4146

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EXAMINER

GUSHI, ROSS N

ART UNIT PAPER NUMBER

2833

DATE MAILED: 05/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/689,465	CLARK ET AL.	
	Examiner	Art Unit	
	Ross N. Gushi	2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte* Quayle, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/14/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6, 8-13, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mooney et al. ("Mooney") in view of Reichman.

Regarding claim 1, Mooney discloses a clamping apparatus for electrically connecting at least a first ground wire to a grounding member, the clamping apparatus comprising: a bottom clamping member 14 comprising a bottom medial portion and a threaded hole on both sides of the bottom medial portion; a top clamping member 13 cooperating with the bottom clamping member and comprising a top medial portion aligned to cooperate with the bottom medial portion and corresponding holes on either side of a top medial portion that correspond to, and are slightly larger in diameter than, the threaded holes to allow a screw (16, 17) to pass through each hole in the top clamping member and thread into the corresponding threaded hole in the bottom clamping member, thereby providing a clamping action around the ground member between the top and bottom clamping members when the screws are tightened, and a trough 15 comprising a base wall 20 and a first and second side wall (29, 33), the trough being attached via the base wall to the top medial portion of the top clamping

member on a side opposite the bottom clamping member, the first sidewall comprising a threaded hole and a set screw adapted to tighten against the base, wherein the trough is arranged with an opening between the first and second sidewall so that the first ground wire can be laid-in the trough at some intermediate point on the ground wire and tightening the set screw applies clamping pressure to the first ground wire between the set screw and the base.

Mooney discloses that the screw 18 is adapted to tighten against the base rather than the trough sidewall. Reichman discloses a ground wire clamping trough where the screw 32 is adapted to tighten against trough sidewall 27. At the time of the invention, it would have been obvious to modify Mooney trough area such that the screw tightens against the sidewall as taught in Reichman. Such a modification would have been a matter of design engineering choice motivated by well known considerations such as ease of access to the set screw and orientation of the device relative to a user, such considerations being well known in the art.

Per claim 2, the Mooney trough is oriented so that the clamped first ground wire is situated in a direction substantially parallel to the grounding member.

Regarding claim 3, the Mooney trough is oriented so that the clamped first ground wire is situated in a direction substantially parallel to the grounding member.

Reichman discloses a trough where the trough may be oriented so that the clamped first ground wire is situated in a direction substantially perpendicular to the grounding member. At the time of the invention, it would have been obvious to orient the Mooney/Reichman trough (as in claim 1) as desired, including such that the trough

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would have been oriented so that the clamped first ground wire was situated in a direction substantially perpendicular to the grounding member as taught in Reichman. The suggestion or motivation for doing so would have been to accommodate situations where the conduit and grounding wire were at various angles as taught in Reichman (see Reichman col. 1).

Per claim 4, one or both of the top and bottom medial portions are crowned in a direction away from the respective other medial portion to create an opening between the top and bottom clamping members for accommodating the grounding member.

Regarding claim 6, Mooney does not show the detail of the screw end. At the time of the invention, it would have been obvious to shape the screw tip as desired including with a rounded tip. Regarding the particular shape of the end, the particular shape of the screw tip would have been a matter of engineering design choice motivated by well known consideration such as cost, ease of manufacturing, frictional coefficient against the ground wire, safety, etc.. See In re In re Dailey, 149 USPQ 47 (CCPA 1966).

Per claim 8, the Mooney/Reichman trough is capable of accommodating an additional second ground wire laid-in along side the first ground wire in the trough, said first and second ground wires being mechanically and electrically connected by the clamping pressure of set screw.

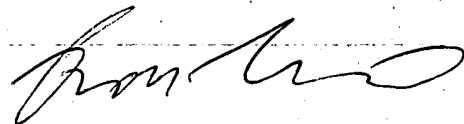
Claims 9-13, 15, and 17 are rejected for the reasons pertaining to claims 1-4, 6, 8.

Claims 5 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mooney and Reichman as in claims 4 and 13 in view of Bondeson. Mooney does not show serrations. Bondeson discloses serrations 17. At the time of the invention, it would have been obvious to include serrations on the Mooney clamps as taught in Bondeson. The suggestion or motivation for doing so would have been to improve the grip of the clamp on the grounding conduit as taught in Bondeson.

Claims 7 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mooney and Reichman as in claims 1 and 9 in view of Shemtov. Mooney does not use a wedge. Shemtov discloses wedge 33. At the time of the invention, it would have been obvious to include a wedge on the Mooney screw as taught in Shemtov. The suggestion or motivation for doing so would have been to better secure the ground wire as taught in Shemtov.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ross Gushi whose telephone number is (571) 272-2005. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Paula A. Bradley, can be reached at 571-272-2800 extension 33. The phone number for the Group's facsimile is (703) 872-9306.



ROSS GUSHI
PRIMARY EXAMINER